

41. A non-human mammal according to claim 35 wherein the mammal is a mouse.
42. A non-human mammal according to claim 35 wherein the mammal is a rabbit.

REMARKS

Claims 1-19 were pending in the application and were variously rejected under the judicially created doctrine of obviousness-type double patenting over copending application no. 08/802,282, 35 USC § 101 and 35 USC § 112. Claims 14-19 were rejected under 35 USC § 102(b) in light of U.S. Patent No. 5,057,420. Claims 1-13 were indicated to be free of the prior art.

Applicants thank Examiner Deborah Crouch for the courtesy of a telephone interview on October 25, 2000, with Applicants' representative Dr. David J. Earp. During that interview, the pending rejections were discussed, as were new claims proposed by Applicants to clarify the aspects of the invention being claimed in this application. Applicants herewith submit new claims 20-42 for consideration, and reconsideration of the application in light of the new claims and the following discussion is respectfully requested.

New Claims

The new claims presented herewith are offered to clarify the nature of the invention and respond to specific § 112 issues raised in the prior Office action. Support for these new claims is found throughout the specification and claims as originally filed. No new matter is introduced through these new claims.

Double Patenting Rejection

Applicants understand that the provisional rejection of the previously pending claims under the judicially created doctrine of obviousness-type double patenting over copending application no. 08/802,282 will be applied to the new claims presented herein. Applicants have paid the issue fee for application serial no. 08/802,282, and expect that a corresponding patent will issue in the near future. Applicants will provide a terminal disclaimer when that patent issues and the claims in the present application are indicated to be otherwise allowable.

35 USC § 101 Rejection

Applicants do not agree that claims reading on reconstituting a human embryo are properly rejected under 35 USC § 101. However, to expedite examination and allowance of the application, Applicants have taken the Examiner's suggestion and inserted "non-human" into each claim.

35 USC § 112 Rejection

The claims were variously rejected under § 112 first and second paragraphs. As discussed in the October 25th telephone interview, the newly presented claims have been drafted to take into account these rejections. The nature of the claims is also commensurate with the claims allowed by the Examiner in the parent application, 08/802,282. For example, Applicants have specified that the donor cell and the recipient cells are from the same species, and have specified that the donor cell is a quiescent diploid donor cell.

35 USC § 102(b) Rejection

Applicants note the Examiner's rejection of previously pending claims 14-19 under 35 USC § 102(b). As discussed in the telephone interview, Applicants do not agree that this rejection is proper. However, for the purpose of expediting examination and allowance of the present application, the claims have been limited to exclude bovines. The '420 patent does not teach or suggest non-bovine reconstituted non-human mammalian embryos made by the processes defined in the pending claims, or the corresponding non-human mammals produced by such processes. Accordingly, the claims are allowable over the cited art.

Additional Issues

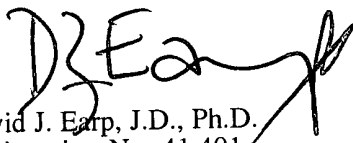
In the October 25th telephone interview, the Examiner indicated that the claims may face an additional rejection based on an argument that reconstituted non-human mammalian embryos and non-human mammals as defined in the claims as pending following entry of this amendment would be anticipated by previously existing embryos and mammals. However, as noted by Applicants' representative in the interview, a mammal cloned by nuclear transfer is genetically distinct from a mammal that may have previously existed. This is evidenced by the distinct mitochondrial and nuclear genomes of mammals created by nuclear transfer. As detailed in the enclosed paper by Evans, *et al.* (Evans, *et al.*, Nature Genetics 23:90-93 (1999)), a mammal cloned by nuclear transfer has a mitochondrial genome that is inherited from the oocyte donor, and a nuclear genome that is entirely inherited from the nucleus donor. Accordingly, non-human mammalian embryos and mammals produced by the nuclear transfer processes defined in the claims are genetically distinct

from, and therefore neither anticipated by, nor rendered obvious in light of, existing mammals, including the mammals from which the donor nucleus and recipient cell were derived.

SUMMARY

Applicants again wish to thank Examiner Crouch for the helpful telephone interview. If anything further is required before a Notice of Allowance can be issued for the present application, the Examiner is requested to telephone Applicants' representative, undersigned.

Respectfully submitted,


David J. Earp, J.D., Ph.D.
Registration No. 41,401

GERON CORPORATION
230 Constitution Drive
Menlo Park, CA 94025
Telephone: (650) 473-7721
Fax: (650) 473-8654

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